

LISTING OF CLAIMS:

The present listing of claims replaces all prior listings or versions of claims in the present application.

1. (Currently Amended) A vacuum thermal insulating valve comprising; characterized by that, with the vacuum thermal insulating valve formed by

(a) a valve comprising equipped with a valve body and an actuator; and

(b) a vacuum thermal insulating box thatwhich houses thesaid valve, the aforementioned vacuum thermal insulating box comprises

i. a square-shaped lower vacuum jacket equipped with a cylinder-shaped vacuum thermal insulating pipe receiving part on its side and also with an upper face thatwhich is made open; and

ii. a square-shaped upper vacuum jacket hermetically fitted to thesaid lower vacuum jacket from the above and the square-shaped upper vacuum jacket has also with a lower face thatwhich is made open; and the

iii. a first jointed part is formed by bending anthe inner wall and anthe outer wall of anthe upper end of the afore-mentioned lower vacuum jacket toward anthe inside of the box in the shape of a brim; and also the jointed part is formed a second jointed part formed by bending atthe center part of atthe height direction of the side of thesaid lower vacuum jacket toward anthe outside of the box in the shape of a brim, and further a thirdthe jointed part is formed by bending anthe inner wall and anthe outer wall of atthe lower end of the afore-mentioned upper vacuum jacket toward the outside of the box in the shape of a brim, and both vacuum jackets are connected such combined in the manner that atthe vacuum thermal insulating side wall of the upper vacuum jacket is positioned toward atthe vacuum thermal insulating side wall of

the afore mentioned lower vacuum jacket, and wherein the third to make the jointed part of the lower end of the afore mentioned upper vacuum jacket and the second jointed part of the outer wall-side of the lower vacuum jacket are hermetically sealed contacted by installing a first thermal insulating material layer, and a fourth also make the jointed part of formed by an the inner wall of at the ceiling part of the upper vacuum jacket and first jointed part of the upper end of the lower vacuum jacket is hermetically sealed contacted by installing a second thermal insulating material layer.

2. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein the is so made that a valve is equipped with a valve unit body is a unit made by a plurality plural number of valve bodies that are being integrally connected.
3. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein is so made that a heater is mounted on the a valve body and the said heater is made to be a plane heater fixed faxed to the valve body.
4. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 34,
wherein the plane heater is fixed to an outer surface of the is so constituted that a valve body to which outer surface a plane heater is fixed and the valve body further comprises an with which inner part comprising a valve seat and a valve seat part are equipped.
5. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein each is so made that a thermal insulating material layer comprises is of a silicon sponge.

6. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein is so made that the outer wall of the upper vacuum jacket is 2mm thick and the its
inner wall of the upper vacuum jacket is 1.5mm thick, and the inner wall of the lower vacuum
jacket is 2mm thick and at the lower part of the its outer wall of the lower vacuum jacket is
2mm thick and at the upper part of the side wall of the outer wall of the lower vacuum jacket
is 1.5mm thick, and wherein the inner wall and outer wall of the upper vacuum jacket and the
inner wall and outer wall of the lower vacuum jacket they are made of stainless steel.

7. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein the is so constituted that a vacuum thermal insulating pipe receiving part installed on
the side of the lower vacuum jacket is made to be a 50mm to ~150mm long cylinder-shaped
vacuum jacket made of a 2mm thick stainless steel plate, and O-rings made of the thermal
insulating material are placed on at the peripheral face of one end or both ends of at the tip part
of the vacuum thermal insulating pipe to be inserted into the said vacuum thermal insulating
pipe receiving part from the outside, and the afore-mentioned O-rings made of the thermal
insulating material are disposed caught between the vacuum thermal insulating pipe receiving
part and the tip part of the vacuum thermal insulating pipe thereof.

8. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein is so constituted that the second jointed parts and third jointed part, in the shape of a
brim, are disposed at of the side walls of the lower upper and upper lower vacuum jackets,
respectively, and when combined in an opposite direction are pressed into an appropriate
distance by a plurality plural number of press-clips with an appropriate space.

9. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein a is so made that the height of an the overlapped part that forms when the upper and
lower vacuum jackets are combined with the combination of the upper and lower vacuum
jackets which forms at the side wall of the vacuum thermal insulating box and is made to be
more than 100mm.

10. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
wherein an is so made that the inner wall face of the vacuum thermal insulating spaces of the
upper vacuum jacket and lower vacuum jackets undergoes is performed the heat treatment
after plating.